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#### **PCT**

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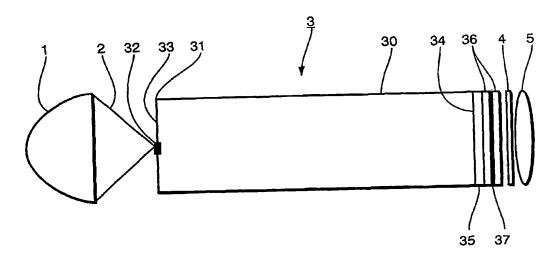
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[Continued on next page]

(54) Title: PROJECTION DEVICE HAVING AN INCREASED EFFICIENCY



(57) Abstract: The invention relates to a projection device for projecting an image, comprising a light source (1), a LCD projection subsystem (3) and a projection means (4, 5) for projecting the image. A small-sized and low-cost projection device is porposed wherein said projection subsystem comprises: a waveguide integrator (30) for guiding light from an entrance (31) to an exit (34), the inner entrance surface (33) of said integrator (30) being coated with a reflective material and having a hole (32) for coupling light emittedfrom said light source (1) into said integrator (30), a reflective polarizer (35) provided at the exit surface (34) of said integrator (30) for reflecting light having the wrong polarization backinto said integrator (30), a transmissive LCD (36) provided at the exit of said reflective polarizer (35) for modulating the lighttransmitted by said polarizer (35), said LCD (36) having an integrated reflective color filter array (37) for reflecting light having the wrong color back into said integrator (30).

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ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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## INTERNATIONAL SEARCH REPORT

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According to	International Patent Classification (IPC) or to both national classification	n and IPC					
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Minimum do	cumentation searched (classification system followed by classification s G02F H04N	symbols)					
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C. DOCUM	ENTS CONSIDERED TO BE RELEVANT		D. burnette deire Ne				
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